

AUTOMATED EXTERNAL DEFIBRILLATOR (AED) PROGRAM

for the



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SC Budget and Control Board AED PROGRAM

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SC Budget and Control Board AED PROGRAM

PURPOSE:

This program enables trained and authorized personnel through the use of automated external defibrillator (AED) devices to intervene promptly in cases of sudden cardiac arrest. The South Carolina (SC) State Legislature, the SC Budget and Control Board (Board) and some tenants in Board facilities, in compliance with the 1999 SC AED Law (Chapter 76 Section 44-76-10 to 44-10-50; <http://www.scstatehouse.gov/code/t44c076.htm>) are providing technology that may sustain an individual's life until trained emergency medical services (EMS) personnel arrive on the scene.

Helping to save lives is a shared responsibility. The Board's emergency response program complements (does not replace) the existing EMS/ 9-1-1 structure. Trained employees can help keep a sudden cardiac arrest victim alive for EMS personnel to treat when they arrive. Training employees in cardiopulmonary resuscitation (CPR) and in AED use can minimize time to defibrillation. For the best chance of survival, a shock to the heart should be delivered within the first 5 minutes. The likelihood of successful resuscitation decreases by approximately 10 percent with every minute that passes. After 10 minutes without defibrillation, few attempts at resuscitation are successful. Nevertheless, the average response time for emergency medical services in a typical community is nine minutes. AED devices are to be strategically placed within Board buildings to be either held by trained personnel or are public access units mounted in protective cases near the entrance of a building, similar to the convenience of fire extinguishers, so that trained persons have immediate access to this potentially lifesaving equipment.

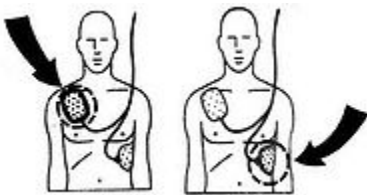
SCOPE:

This Board AED Program is an addendum to the SC State Legislature AED Program that addresses Board employees and facilities. Since AED devices are located in Board buildings, professionally licensed medical personnel and any employee certified and current in accordance with either the SC State Legislature AED Program or the Board AED program is authorized to use an AED located in a Board-owned building.

DEFINITIONS:

AUTOMATED EXTERNAL DEFIBRILLATOR (AED): An AED is a portable device used by a trained First Aid Care Giver to treat a victim of sudden cardiac arrest (SCA). The AED operator turns on the unit and applies two electrode pads to the victim's bare chest. The AED then automatically diagnoses the potentially life threatening cardiac arrhythmias of the victim's heart and is able to treat them with defibrillation, the application of electrical therapy (shock to stop the arrhythmia, which allows the heart to reestablish an effective rhythm), or determine CPR is needed when defibrillation is not appropriate. Voice prompts will direct the AED operator to ensure no one is touching the victim to avoid accidental injury and can provide multiple shocks

under the operator's control. After the first shock the AED will analyze the victim in regular intervals and either instructs that CPR be given or to administer a shock, whichever is required. An AED is designed to be used by a trained layperson, which is in contrast to more sophisticated defibrillators with advanced functions (such as act as a pace maker for a slow heart beats or read electrocardiograms - ECG) used by healthcare professionals. Various makes and models of AED are available in some but not all Board buildings (see Appendices - Locations). Care Givers only need to be trained on how to operate the specific make and model they are expected to use, i.e., the type in the facility where they normally work. However, all AED devices generally work the same. The differences in makes and models of AED vary in being manual or semi-/fully automatic; in selecting adult or child energy levels by using adult versus pediatric pads or a selector knob or key; self-diagnostics for maintenance; display readings; and whether or not incident history (where the victim's ECG along with details of the time the unit was activated and the number and strength of any shocks delivered) can be down loaded to computer. Because the AED operator may be hearing impaired, many AED devices now include visual prompts as well. The Board-selected Philips AED is semi-automatic and tells the AED operator a shock is needed but requires the operator to push a button to actually deliver the shock, and the operator cannot override the AED to deliver a shock when the AED advises "no shock."



Typical placement of AED pads

AED LIAISON: An AED Liaison is a person designated in writing (see Appendices - Locations) by Board Safety who is accountable for the physical security, management and maintenance of the AED assigned to a specified facility. The liaison reports emergency use of the AED and maintenance problems to the AED Oversight Physician through the HCP and/or Board Safety. An AED Liaison normally will be the Lead Emergency Coordinator for the specified building.

AMERICAN HEART ASSOCIATION (AHA): The AHA is a national organization that provides certification training for First Aid Care Givers and is the primary course of the two programs Board Safety authorizes to provide such training. AHA recertification for first aid, CPR and AED use is every two years.

AMERICAN RED CROSS (ARC): The ARC is a national program that provides certification training for First Aid Care Givers and is one of the two programs Board Safety authorizes to provide such training. ARC recertification for first aid is every three (3) years while recertification for CPR and AED use is every year (annually).

BOARD: Refers to employees who work for and facilities owned by the SC Budget and Control Board.

BOARD SAFETY: The Board Safety Office is responsible for providing or coordinating First Aid/CPR/AED (and Environmental Emergencies) training for designated First Aid Care Givers. Board Safety officers are to be notified via telephone when there is a medical emergency in a Board facility, especially one requiring First Aid/CPR/AED use or transport for emergency

medical care, so they may respond as able for incident management, reporting and documentation. The Board's Safety Officers are Holly Bockow, 737-2311 WP/803-513-5354 cell; and Bernie Lee, 737-2315 WP/803-513-5352 cell; 1201 Main Street, Suite 420.

BUREAU OF PROTECTIVE SERVICES (BPS): The security service assigned to protect designated Board buildings and the employees therein.

CARDIOPULMONARY RESUSCITATION (CPR): CPR is a life saving technique utilizing rescue breathing and chest compressions to introduce oxygen and distribute oxygenated blood throughout the body. AED use requires the First Aid Care Giver know how to use the AED in conjunction with CPR.

- **ADULT CPR/AED:** CPR procedures used for adults who are persons over 8 years of age or those weighing more than 55 pounds. AED devices are designed for adult victims.
- **CHILD CPR/AED:** CPR procedures used for children who are one (1) year old up to 8 years of age or those weighing 20 to 55 pounds. AED devices designed for children typically will have an attenuated system (lower shock level selected by the AED operator by knob setting or insertion of a "child key" or pediatric pads).
- **INFANT CPR/AED:** CPR procedures used for infants who are not yet (1) year old or weigh less than 20 pounds. There is insufficient data to make a recommendation for or against using an AED in infants less than 1 year of age.

EMERGENCY MANAGEMENT SERVICES (EMS): Ambulance, fire and/or police are dispatched according to the emergency reported to 9-1-1.

FIRST AID CARE GIVER: AED use requires the person giving CPR to a victim is certified through an AHA or ARC course and current. In order to be a trained AED operator, the Care Giver must be certified in First Aid and Adult/Child CPR and AED use. Certification in Infant CPR is optional but recommended for Board First Aid Care Givers due to the public's general access to state government buildings and grounds. (NOTE: Senate and House Security and the Bureau of Protective Services, especially those assigned duty at the Statehouse and Governor's Mansion, are required by the Legislative Nurse to be certified in First Aid and Adult/Child and Infant CPR and AED.) Care Givers should take a first aid kit and AED to the incident scene or, in case of an emergency evacuation, to the building's Assembly Area. An AED and first aid kit is recommended to also contain a face shield for providing a barrier between the victim and Care Giver during rescue breathing; a pair of non-allergenic nitrile rubber gloves for personal protection against transmitting disease between the Care Giver and victim; a pair of trauma shears for cutting, as necessary, through a victim's clothing to expose the chest where AED pads are applied; a small towel for wiping away any moisture on the chest to ensure proper AED function; a razor for shaving those with very hairy chests to ensure positive AED pad contact with the victim's skin; and a bio-hazard bag for disposal of contaminated items.

GOOD SAMARITAN LAW: Generally, where an unconscious victim cannot respond, a Good Samaritan can help them on the grounds of implied consent. However, if the victim is conscious and can respond, a person should first obtain their permission to help. Someone who renders aid, while not acting as a part of one's occupation or job description, cannot be held civilly liable for the harm or death of a victim by providing improper or inadequate care, given that the harm or death was not intentional and the responder was voluntarily acting within the limits of their training and in good faith in responding to the emergency. A claim of negligent care could result

if the injuries or illness were made worse by a volunteer who acts in a willful and wanton or reckless manner in providing the care, advice, or assistance. It may also be considered an act of negligence if a person does not at least call (9-1-1) for help. SC Law Section 15-1-310 (<http://www.scstatehouse.gov/code/t15c001.htm>), i.e., the SC Good Samaritan Law, describes liability for emergency care rendered at the scene of an accident, whereas SC Law Section 44-76-40 (<http://www.scstatehouse.gov/code/t44c076.htm>) includes use of an AED under the Good Samaritan Law.

HEALTH CARE PROFESSIONAL (HCP): A HCP is a licensed physician, surgeon, physician assistant, nurse practitioner or nurse licensed by the state of South Carolina. An HCP is designated for oversight of the Board AED Program including AED Liaison Coordinators to ensure compliance with federal, state and local policies and procedures. The HCP for the Board AED Program is the SC Legislative Nurse, Betsy Hossenlopp BSN.RN.; WP 212-6175; Gressette Building, Room 511.

HOUSE SECURITY: The security force assigned to protect House members of the SC legislature in the House chamber of the Statehouse and the Blatt Building.

OVERSIGHT PHYSICIAN: A South Carolina licensed physician or health care professional is responsible to provide medical review and approval of this AED Program prior to implementation, and will be available for consult. The oversight physician for this program is _____.

SENATE SECURITY: The security force assigned to protect Senate members of the SC legislature in the Senate chamber of the Statehouse and the Gressette Building.

SUDDEN CARDIAC ARREST (SCA): SCA is where the heart has a dysfunctional irregular pattern but correctable by shock treatment, i.e., ventricular fibrillation (chaotic beat) or tachycardia (beating too fast), both of which could lead to irreversible brain damage and death if left uncorrected.

PROTOCOL:

All AED operators will:

- Have a current AHA or ARC certification and are to have access to AED devices in Board buildings for the purpose of providing initial emergency care for SCA victims.
- Notify the closest emergency medical services (EMS – 911) as soon as possible when rendering emergency care or treatment. As soon as possible, the AED operator is to notify the HCP, the AED Liaison and/or Board Safety and complete the Documentation of AED Use form (see Appendices).

The AED Liaison will:

- Keep the HCP and/or Board Safety involved and informed of all AED incidents and maintenance issues.
- Make the AED available to trained First Aid Care Givers in an emergency.
- Regularly check the assigned AED device(s) (see checklist in Appendices).

Board Safety will:

- Regularly inspect, test and maintain all Board-owned AED devices according to the manufacturer's procedures, and electronic records thereof will be available for the HCP.
- Maintain training records in its learning management system for Board employees certified in First Aid/CPR/AED.
- Replenish AED pads and any other perishables associated with the AED and first aid kit used during emergency response in order to return the AED and first aid kit to service.

BOARD AED PROGRAM AUTHORIZATION:

I have reviewed and approve the Board AED Program that complies with the 1999 SC AED Law (Chapter 76 section 44-76-10 to 44-10-50).

The Philips FRx 86/304 AED operates within the scope of 2005 American Heart Association Guidelines and was selected because of its versatility to include use with adults and children and for its ease of use and reliability.

AED OVERSIGHT PHYSICIAN:

NAME: _____

ADDRESS: _____

PHONE: _____

SIGNATURE: _____

DATE: _____

HEALTH CARE PROFESSIONAL:

NAME: Betsy Hossenlopp BSN.RN., 212-6175

SIGNATURE: _____

DATE: _____

**PHILIP'S HEARTSTART
AED CHECKLIST**
For AED Liaison

The AED Liaison will check assigned AED devices at least quarterly (i.e., Jan 1, Apr 1, Jul 1 and Dec 1) for:

- _____ Battery Power - Green light (blinking)
(Notify Board Safety if the Battery Power light is not green)
- _____ Expiration Date- AED Battery
(Notify Board Safety if battery is due to expire in the next 90 days)
- _____ Expiration Date – Perishable Supplies in AED Kit
(Notify Board Safety if any perishable supply is due to expire in the next 90 days)
- _____ Report any other problems or concerns with the AED function or its supplies
to Board Safety immediately
- _____ Provide the results of these checks to Board Safety (via e-mail or hard copy)

AED Location: _____ Person Checking: _____
(Building Name, Room/Device Number)

AED INSPECTION CHECKLIST
For Board Safety

The Philips FRx AED performs a self-test daily. In addition, a battery insertion self-test is run whenever a battery is installed in the device. The defibrillator's extensive automatic self-test features eliminate the need for any manual calibration. Other than the checks recommended after each use of the AED, maintenance is limited to periodically checking the ready green light.

Board Safety will ensure quarterly AED checks are accomplished by the designated AED Liaisons. Board Safety will do the check should an AED Liaison not be able to perform a quarterly check.

Records of quarterly checks may be kept electronically and will be provided to the HCP and/or approving physician upon request. These records will include for each AED:

- Date checked
- Name of Person checking the device
- Condition:
 - OK
 - Problem – to be briefly described along with any required corrective action

Records shall include any maintenance action required for an individual AED such as malfunction, expired battery and corrective actions. Any maintenance problem that cannot be corrected on site, i.e., that takes the AED out of service, shall be reported to the HCP.

GENERAL AED PROCEDURES

Before applying the pads, remove items that are in close proximity to the pads such as:

- Medication patches
- Jewelry
- Underwire bras

If the victim has a hairy chest, the pads may not make adequate skin contact. The AED may instruct to press the pads more firmly. If unsuccessful and:

- If two sets of pads are available, apply the first set of pads and rip off excess hair then apply the second set of pads.
- If a razor is available, shave the areas where the pads are to be applied before applying the pads.

Do not use the AED if the victim is lying in water or the chest is wet or sweaty. Remove the victim to a dry area and/or dry the chest.

Do not touch or move the victim to allow the AED to conduct a proper analysis.

The AED will not deliver a shock unless the AED operator pushes the shock button.

- If you do not touch the shock button within 30 seconds the AED will disarm itself. After a short pause it will re-analyze the victim's heart rhythm.
- If you need to turn off the AED during use, press and hold the On/Off button for one second to return to the standby (de-energized) mode and press again to turn off.

If a shock is not needed, the AED:

- Will not energize
- Will inform the operator a shock is not advised
- Cannot be overridden by the operator to give a shock

Do not remove the battery unless you are:

- Installing a charged replacement battery
- Self-testing the AED after use

Clean the AED in accordance with the manufacturer's instructions, as required (typically with a damp cloth, diluted chlorine bleach or 70% isopropyl (rubbing) alcohol).

DOCUMENTATION OF AED USE

VICTIM'S INFORMATION

NAME: _____

ADDRESS: _____

CITY: _____ STATE _____

AGE: _____ GENDER: _____

TELEPHONE: _____

WITNESS INFORMATION

NAME: _____

TELEPHONE: _____

INCIDENT INFORMATION

DATE: _____

ADDRESS: _____

LOCATION: _____

TIME OF INCIDENT: _____

TIME STARTED CPR: _____

TIME STARTED AED: _____

NUMBER OF SHOCKS: _____

TIME EMS ARRIVED: _____

VICTIM'S MEDICAL HISTORY / MEDICATIONS: (check all applicable)

_____ Medical ID Bracelet/Necklace for _____

Nitro Glycerin

Defibrillator

OTHER: _____

[illegible]

CONTACTED: _____ **Board Safety** _____ **AED Liaison** _____ **HCP**

CONTACTED BY: _____ TELEPHONE _____

NARRATIVE: (provide a detailed description of the condition of the victim when found and the events that followed until EMS arrived and assumed care for the victim)

[illegible]

(Continue on separate page, as required)

AED OPERATOR: _____ **TELEPHONE:** _____

(Name)

SIGNATURE _____ DATE: _____

Call and Submit this Report and AED Used to:

SC Budget and Control Board Safety

1201 Main Street, Suite 420

Holly Bockow, 737-2311 or Bernie Lee, 737-2315

(Board Safety - Cc: Report to HCP)

SC Budget and Control Board AED PROGRAM Locations

AED devices are located in the following Board buildings:

BUILDING	ADDRESS	LOCATION	TYPE AED	AED LIAISON
Adjutant General Office Building	1 National Guard Rd	1 st Floor, Elevator Lobby *		
Adjutant General Office Building	1 National Guard Rd	2 nd Floor, Elevator Lobby *		
Adjutant General Office Building	1 National Guard Rd	3 rd Floor, Elevator Lobby *		
Blatt Building	1105 Pendleton St	Security Desk, 1 st Floor Entrance Lobby *	Phillips Heartstart FRX	House Security Betsy Hossenlopp, RN hossenloppb@scsenate.org 212-6175
Columbia Mills Building	301 Gervais St	Public Safety (rear entrance) *	Medtronic	Life server - Larry Kohn; Chief Tonia Johnson 898-4981 Tonia.Johnson@scmuseum.org
Dennis Building	1000 Assembly St	1 st Floor, North Hall (at Snack Bar) *	Zoll AED Plus	Dept. of Natural Resources Mary Crockett, 734-9111
Dennis Building	1000 Assembly St	2 nd Floor *	Zoll AED Plus	Dept. of Natural Resources Mary Crockett, 734
Dennis Building	1000 Assembly St	3 rd Floor *	Zoll AED Plus	Dept. of Natural Resources Mary Crockett, 734
Dennis Building	1000 Assembly St	Room 621*		Attorney General: Lindsey Lemay, RN, 843-861-3671,
Gressette Building	1101 Pendleton St	Security Desk, 1 st Floor Entrance Lobby *	Phillips Heartstart FRX	Senate Security Betsy Hossenlopp, RN hossenloppb@scsenate.org 212-6175
Statehouse	1100 Gervais St.	Cabinet on 2 nd Floor nearest East Stairwell Exit *	Phillips Heartstart FRX	Senate Security Betsy Hossenlopp, RN hossenloppb@scsenate.org 212-6175

* This AED device is owned and maintained by the tenant, not the Board

NOTE: AED devices are in the process of being purchased to be installed in designated buildings.